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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

08/06/2008

Lynn L. Augspurger IBM Corporation 2455 South Road, P386 Poughkeepsie, NY 12601 EXAMINER

RUTZ, JARED IAN

ART UNIT

PAPER NUMBER

2187

DATE MAILED: 08/06/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,252	06/25/2003	Thomas J. Heller JR.	POU920030046US1	3685

TITLE OF INVENTION: MULTIPROCESSOR COMPUTER SYSTEM HAVING MULTIPLE COHERENCY REGIONS AND SOFTWARE PROCESS

MIGRATION BETWEEN COHERENCY REGIONS WITHOUT CACHE PURGES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	11/06/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

maintenance fee notifica	tions.	•						correspondence address a rate "FEE ADDRESS" for domestic mailings of the
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
	7590 08/06/2008				Certi	ficate	of Mailing or Transi	mission
Lynn L. Augsp IBM Corporatio 2455 South Roa	I S a tı	I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.						
Poughkeepsie, N	NY 12601		Г					(Depositor's name
								(Signature
								(Date
APPLICATION NO.	FILING DATE		FIRST NAMED INVENT	OR		ATTOI	RNEY DOCKET NO.	CONFIRMATION NO.
10/603,252	06/25/2003		Thomas J. Heller JR	R. POU920030		U920030046US1	3685	
		COMPUTER SYSTEM ONS WITHOUT CACH		Е СОНЕ	RENCY REGI	ONS .	AND SOFTWARE P	ROCESS
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DU	JE PRE	EV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE
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RUTZ, JA	RED IAN	2187	711-141000					
 Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. 			or agents OR, altern (2) the name of a single registered attorney of a registered patent a	e names of up to 3 registered patent attorneys ents OR, alternatively, e name of a single firm (having as a member a ered attorney or agent) and the names of up to stered patent attorneys or agents. If no name is a no name will be printed.				
PLEASE NOTE: Un	less an assignee is ident th in 37 CFR 3.11. Comp	A TO BE PRINTED ON ified below, no assignee oletion of this form is NO	data will appear on the	e patent. an assign	nment.			ocument has been filed fo
Please check the appropr	riate assignee category or	categories (will not be pr	rinted on the patent):	Indi	vidual 🖵 Cor	porati	on or other private gro	oup entity 🔲 Governmen
4a. The following fee(s)	b. Payment of Fee(s): (P		rst reapply any	prev	iously paid issue fee	shown above)		
Issue Fee	.T	:	☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached.					
☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).					
5. Change in Entity Sta	tus (from status indicated s SMALL ENTITY state	· · · · · · · · · · · · · · · · · · ·	☐ b. Applicant is no l					FR 1 27(a)(2)
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Typed or printed name				Registration No ed to obtain or retain a benefit by the public which is to file (and by the USPTO to process)				
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

OMB 0651-0033

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10/603,252	06/25/2003	Thomas J. Heller JR.	POU920030046US1	3685	
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Lynn L. Augspur IBM Corporation 2455 South Road, 1			ART UNIT	PAPER NUMBER	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 851 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 851 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)		
	10/603,252	HELLER, THOMAS J.		
Notice of Allowability	Examiner	Art Unit		
	JARED I. RUTZ	2187		
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this ap or other appropriate communication IGHTS. This application is subject to	oplication. If not included n will be mailed in due course. THIS		
1. This communication is responsive to 4/21/2008.				
2. The allowed claim(s) is/are <u>1-30</u> .				
 3. Acknowledgment is made of a claim for foreign priority unally all blooms. All blooms blooms blooms blooms blooms. 1. Certified copies of the priority documents have all copies of the priority documents have all copies of the certified copies of the priority documents. 	e been received. e been received in Application No			
International Bureau (PCT Rule 17.2(a)).				
* Certified copies not received:				
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements		
4. A SUBSTITUTE OATH OR DECLARATION must be subminformal PATENT APPLICATION (PTO-152) which give				
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.			
(a) ☐ including changes required by the Notice of Draftspers	son's Patent Drawing Review(PTO	-948) attached		
1) ☐ hereto or 2) ☐ to Paper No./Mail Date				
(b) ☐ including changes required by the attached Examiner' Paper No./Mail Date	s Amendment / Comment or in the 0	Office action of		
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t				
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT				
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5. ☐ Notice of Informal F	Octant Application		
 Induce of References Cited (PTO-692) Induce of References Cited (PTO-	6. ☐ Interview Summary			
Information Disclosure Statements (PTO/SB/08),	Paper No./Mail Da 7. ⊠ Examiner's Amend	ate .		
Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit	<u></u>			
of Biological Material	<u>—</u>	8. 🛮 Examiner's Statement of Reasons for Allowance		
	9.			

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lynn Augspurger (Reg. No. 24,227) on 7/29/2008.

The application has been amended as follows:

In claim 1, line 12, change "chache" to --cache--.

In claim 1, line 24, after "established" insert --until--.

- 2. The following is an examiner's statement of reasons for allowance:
- 3. Claim 1 recites the limitation "and when said supervisor software program is moving a coherency region from one distinct set of old processing nodes to another distinct set of processing nodes it is leaving behind old cache entries for the coherency region on old nodes and ensures that these old cache entries will be seen by incoming storage requests originating from new processing nodes and that cache entries for main storage addresses in the new processing nodes will not be established until the old entries are invalidated". Said limitation is taught by the specification as originally filed at least at second claim 27, renumbered as claim 31 and cancelled in the response

submitted 12/23/2008. Said limitation, in combination with the other recited limitations of claim 1, is not taught or suggested by the prior art of record.

- 4. Claims 2-27 depend from claim 1, and are considered allowable for at least the same reasons as claim 1.
- 5. Claim 28 recites the limitation "said supervisor software creates a table in the multiprocessor computer system for each processing node which table has an entry for every Coherency Region ID that is currently allowed to be dispatched on said processing node". Said limitation is taught by the specification as originally filed at page 11 line 30 through page 12 line 2. Said limitation, in combination with the other recited limitations of claim 28, is not taught or suggested by the prior art of record.
- 6. **Claims 29-30** depend from claim 28, and are considered allowable for at least the same reasons as claim 28.
- 7. Foster et al. (US 7,065,761) teaches the use of tables for managing logical partitions, but does not teach or suggest said limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JARED I. RUTZ whose telephone number is (571)272-5535. The examiner can normally be reached on M-F 8:00 AM - 4:30 PM.

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Art Unit: 2187

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Ellis can be reached on (571)272-4205. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jared I Rutz Examiner Art Unit 2187

jir

/Kevin L Ellis/ Acting SPE of Art Unit 2187